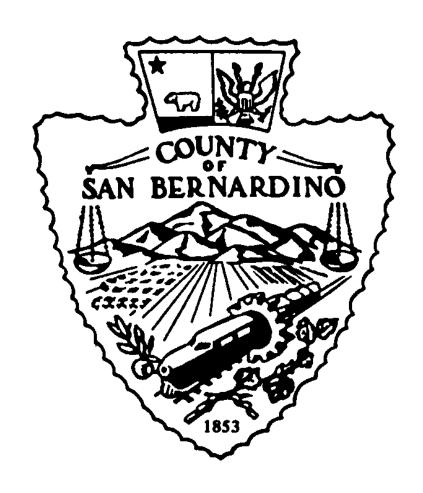
# Ergonomics



# **ERGONOMICS PROGRAM**

#### SCOPE

This section establishes County of San Bernardino procedure for addressing the potential for ergonomic or cumulative trauma illness/injury in the workplace. It provides information and guidance on the process of anticipating, identifying, evaluating, and mitigating workplace hazards from repetitive motion tasks in connection with employment at San Bernardino County.

This procedure sets forth minimum standards for all County Departments, Agencies, and Groups. Individual entities may implement more stringent standards.

Copies of Department prepared programs are to be provided to Risk Management/Safety Section as well as included in the immediately following divider labeled "Department Program."

## **PURPOSE**

Title 8, California Code of Regulations, General Industry Safety Orders, Section 5110 requires California employers to establish effective programs for the purpose of eliminating or minimizing the risk of employee exposure to repetitive musculoskeletal injuries through work site evaluations, employee training, and utilization of appropriate engineering and work practice controls.

# INTRODUCTION

It is the goal of San Bernardino County to make every task performed by its employees physically and environmentally safe. In many instances, this is done through the use of "Ergonomics". Ergonomics focuses on the interaction between people and their work, the tools they use, the tasks they perform and the physical environment in which they perform their jobs.

## **DEFINITIONS**

Administrative Controls- Any procedure which significantly reduces daily exposure by control or manipulation of the work schedule or manner in which work is performed (i.e. using job rotation, allowing frequent rest breaks, alternating tasks, adjusting work methods).

<u>Awkward Posture</u>- Any part of the body working in a stressful or non-neutral posture (i.e. twisting, bending, kneeling, squatting, stooping, extended reaching/stretching).

Engineering Controls- Physical changes to work stations, equipment, materials or any other relevant aspect of the work environment which reduces or prevents exposure to work related risk factors.

Mechanical or Contact Stresses- Produced when the soft tissues of the fingers, hands or wrists are squeezed between the bone and external objects, such as tools, parts, or adjacent equipment.

Repetitive Motions-Performing rapid or continuous repetition of the same constant motions or motion pattern which stresses the body parts performing that motion.

<u>Risk Factors</u>-Procedures that expose any part of the body to awkward positions, repetitive motions, or other forces that increase the risk of a musculoskeletal disorder.

<u>Sustained Posture</u>- Prolonged muscle contraction without movement.

<u>Vibration</u>- Localized vibration exposure is produced by contact between the hands and a vibrating object such as a power tool. Whole body vibration occurs while standing or seated in vibrating environments or objects such as trucks, heavy machinery, or while using heavy equipment such as jackhammers.

Musculoskeletal Disorders (RMIs or CTDs)-Clinically diagnosed repetitive injury of the muscles, tendons, ligaments, peripheral nerves, joints, cartilage, bones, and/or supporting vessels in either the upper/lower extremities or back, which are associated with ergonomic risk factors and which are not the result of acute or instantaneous events.

# **RESPONSIBILITIES**

Department Management and Supervisors have the following responsibilities with regard to ergonomics:

 Ensure implementation of the Ergonomics Program throughout all Departments within the County;

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- 2. Authorize budgeting and expenditure of necessary resources to implement the program; and,
- Provide corrective action as may be deemed necessary or practical to modify or replace equipment, machinery, and tools which are found to create repetitive motion injuries (RMI) if technologically feasible.

Supervisors of employees in jobs, processes, or operations where an RMI has occurred shall:

- Ensure employees are provided with and use appropriate tools, equipment, parts, and materials required to perform the job at the lowest level of exposure to risk factors that is feasible:
- Perform ergonomic worksite evaluations of all jobs, processes or operations for exposure to risk factors which have, or could have, a potential to cause RMIs; and,
- Conduct training and make frequent checks to ensure employees are properly using equipment and controls that have been implemented.

# Risk Management Division shall:

- 1. Prepare guidelines, programs, training, and implementation monitoring in conformance with all Title 8, California Code of Regulations, mandates;
- Develop and present manager/supervisor training;
- Provide consultation with regard to the process of anticipating, identifying, evaluating, and mitigating ergonomic hazards;
- Ensure that a procedure is in place for employees to report symptoms and perceived work related ergonomic risk factors;
- 5. Monitor the effectiveness of the departmental ergonomic program on an on-going basis.

# **Employees will:**

- Follow established procedures to ensure that equipment is properly maintained in good condition;
- Attend ergonomics training as required, and apply the knowledge and skills acquired to actual job tasks, processes or work activities;
- Report damaged, malfunctioning tools, equipment or materials to supervision; and,
- 4. Report signs and symptoms of RMIs and perceived work related ergonomic hazards to supervision.

## **ERGONOMIC WORKSITE EVALUATIONS**

The purpose of conducting an ergonomic worksite evaluation is to:

- Identify the task requirements and any work related ergonomic risk factors of jobs, processes or work activities that may cause or contribute to the development of RMIs.
- Determine any feasible engineering and/or administrative control measures to reduce or prevent employee exposure to RMIs.
- Identify appropriate types of personal protective equipment where effective engineering or administrative controls are not feasible.

Ergonomic worksite evaluations must be conducted by a supervisor when one or more employee(s) is diagnosed within a twelve (12) month period with a work-related RMI.

Supervisors shall routinely perform an ergonomic worksite evaluation on all positions and tasks within his or her area of responsibility for the purpose of maintaining a safe workplace.

Ergonomic worksite evaluations and training are specifically required:

 When an employee reports a symptom which may be related to the development of a work related RMI.

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- For jobs, processes or work activities where work related ergonomic risk factors are known to have caused or aggravated potential RMIs.
- Before and after implementation of new jobs, tasks, tools, equipment or processes.
- When an employee reports an injury as a result of performing tasks or operations common to other employees in the workplace.

## **TRAINING**

- Job risk specific training shall be provided to all employees who have the same job, process or operation of identical work activity at the same workplace location:
- When an employee reports a symptom which may be related to the development of a work related RMI.
- For jobs, processes or work activities where work related ergonomic risk factors are known to have caused or aggravated RMIs.
- Before and after implementation of *new* jobs, tasks, tools, equipment or processes.
- When an employee reports an injury as a result of performing tasks or operations common to other employees in the workplace.
- 2. Employees should be provided training that includes an explanation of:
- The contents of this program.
- The work related ergonomic risk exposures which have been associated with the development of RMIs.
- The symptoms and consequences of musculoskeletal injuries caused by repetitive motion

- The importance of reporting symptoms and injuries to supervision.
- Control measures used to prevent or minimize employee exposure to RMIs.

## RECORDKEEPING

Accurate records should be maintained by each department of all:

- Reports from employees of symptoms of RMIs and any perceived work related ergonomic risks;
- Ergonomic worksite evaluations conducted in the workplace;
- Prevention or control measures implemented to prevent or minimize exposure to work related ergonomic risk factors; and
- Training records, including date(s), name of instructor(s), training materials/ curriculum used, and list of attendees.

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